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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,440	10/23/2003	Jerry A. Pickering	10159	8020

7590 04/27/2005

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EXAMINER

ZACHARIA, RAMSEY E

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 04/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/692,440

Applicant(s)

PICKERING ET AL.

Examiner

Ramsey Zacharia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) 27-58 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☒ Claim(s) 15-26 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/16/2004</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-26, drawn to a fuser member, classified in class 428, subclass 421.
 - II. Claims 27-58, drawn to a composition, classified in class 525, subclass 199.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as a precursor for a self-supporting film and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

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4. During a telephone conversation with Paul Leipold on 14 April 2005 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-26. Affirmation of this election must be made by applicant in replying to this Office action. Claims 27-58 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Information Disclosure Statement

6. The first reference in the information disclosure statement filed 16 January 2004 has been lined through because U.S. Patent 3,699,707 does not correspond to Donnelly et al. published 13 June 1972. It appears that the applicants intended to cite U.S. Patent 3,669,707. As such, U.S. Patent 3,669,707 has been considered and made of record by including it on the attached Notice of References Cited (form PTO-892).

Specification

7. The disclosure is objected to because of the following informalities: copending applications (in paragraphs 083, 092, and 099) should be referred to by their U.S. application serial numbers, not their docket numbers.

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Appropriate correction is required.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Satoh et al. (U.S. Patent 5,547,742).

Satoh et al. teach a fuser roll with a surface layer comprising a fluorosilicone rubber and a fluoro-resin (column 1, lines 59-63). A fluorosilicone rubber is a fluoroelastomer because the broadest reasonable interpretation of fluoroelastomer is a 'fluorine containing elastomer' and a rubber is the same as an elastomer. The fluoro-resin has a particle size of 1-10 μm and may be a tetrafluoroethylene/hexafluoropropylene copolymer, a tetrafluoroethylene/perfluoroalkyl vinyl ether copolymer, an ethylene/tetrafluoroethylene copolymer, or polytetrafluoroethylene having a molecular weight of 1,000 to 1,000,000 (column 4, lines 2-5). The fluoro-resin comprises up to 50 wt% which is taken to be about 50 vol%.

Polytetrafluoroethylene having a molecular weight of 1,000 to 1,000,000 is taken to be nonfibrillatable because paragraph 033 of the instant specification states that fibrillatable PTFE has a much higher molecular weight (on the order of 10,000,000). Moreover, the PTFE of Satoh et al. should at least encompass autoadhesive PTFE since the instant application states that PTFE

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having a molecular weight of about 25,000 to about 250,000 is autoadhesive (and nonfibrillatable) (see paragraph 036).

A homopolymer of tetrafluoroethylene reads on the material of claim 9 since "up to about 5 mole percent" includes zero mole percent.

Regarding claim 14, the fluoro-resin is a polymer and particles of the fluoro-resin will comprise a discontinuous phase in the fluoroelastomer continuous phase.

10. Claims 1, 2, 4, 5, 7-9, and 11-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Chen et al. (U.S. Patent 5,599,631).

Chen et al. teach a fuser roll having an outer layer comprising a continuous fluorocarbon elastomer phase and a discontinuous phase (i.e. particles) of a fluorinated resin (column 2, lines 33-41). The fluorinated resin may be a polytetrafluoroethylene having a molecular weight of 25,000 (column 3, lines 51-54). The outer layer is substantially homogeneous (column 3, lines 55-58), indicating that the fluorinated resin particles are uniformly dispersed in the fluorocarbon elastomer. The ratio of fluorocarbon elastomer to fluorinated resin range from 8:1 to 1:8 and is preferably 4:1 to 1:1 (column 4, lines 1-3).

Polytetrafluoroethylene having a molecular weight of 25,000 is taken to be nonfibrillatable and autoadhesive because paragraph 036 of the instant specification states that PTFE having a molecular weight of about 25,000 to about 250,000 is autoadhesive and nonfibrillatable.

Allowable Subject Matter

11. Claims 15-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. The following is a statement of reasons for the indication of allowable subject matter.

The invention of claim 15 is directed to a fuser member comprising a base and a fusing surface layer. The fusing surface layer comprises a fluoroelastomer and at least about 25 vol% of particles of polytetrafluoroethylene having a number average molecular weight of about 25,000 to about 250,000. The fusing surface layer further comprises a discontinuous phase of an elastomer dispersed through the fluoroelastomer wherein the elastomer is selected from the group consisting of silicones, perfluoropolyethers, and fluoroelastomers..

Satoh et al. and Chen et al. represent the closest prior art. However, neither Satoh et al. nor Chen et al. teach or fairly suggest a fuser member as recited in instant claim 15. Neither reference teaches the addition of elastomer discontinuous phase of silicone, perfluoropolyether, or fluoroelastomer to the fluoroelastomer continuous phase in addition to at least about 25 vol% of polytetrafluoroethylene having a number average molecular weight of about 25,000 to 250,000.

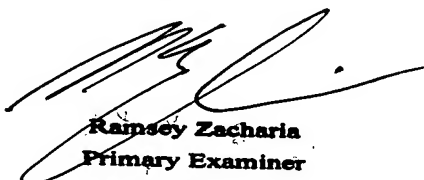
Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramsey Zacharia whose telephone number is (571) 272-1518. The examiner can normally be reached on Monday through Friday from 9 to 5.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney, can be reached at (571) 272-1284. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ramsey Zacharia
Primary Examiner
Tech Center 1700